a spreading section that uses the output pseudo-random number sequence of length N as a spreading code to spectrum-spread the signal for transmission whose input was accepted; and

a signal transmitting section that transmits the spectrum-spread signal.

6. (Currently Amended) The transmitter according to claim 5, further comprising:

a selecting section that selects the sequence initial values $Y_1, Y_2, ..., Y_s$ and the integer parameters $p_1, p_2, ..., p_s$; and

a parameter transmitting section that transmits the selected sequence initial values $Y_1, Y_2, ..., Y_s$ and integer parameters $p_1, p_2, ..., p_s$;

the output unit accepting input of the selected sequence initial values $Y_1, Y_2, ..., Y_s$ and integer parameters $p_1, p_2, ..., p_s$ and outputting [[a]] the pseudo-random number sequence of length N.

7. (Currently Amended) The transmitter according to claim 5, further comprising:

a parameter receiving section that receives the sequence initial values $Y_1, Y_2, ..., Y_s$ and the integer parameters $p_1, p_2, ..., p_s$;

the output unit accepting input of the received sequence initial values $Y_1, Y_2, ..., Y_s$ and integer parameters $p_1, p_2, ..., p_s$ and outputting [[a]] the pseudo-random number sequence of length N.

8. (Currently Amended) A receiver, comprising:

a signal receiving section that receives a signal;

the output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

a despreading section that uses the output pseudo-random number sequence of length N as a spreading code to despread the received signal; and

an output section that outputs the despread signal as a signal for transmission.

9. (Currently Amended) The receiver according to claim 8, further comprising:

a selecting section that selects the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s; and

a parameter transmitting section that transmits the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s;

the output unit accepting input of the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and outputting [[a]] the pseudo-random number sequence of length N.

10. (Currently Amended) The receiver according to claim 8, further comprising:

a parameter receiving section that receives the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s;

the output unit accepting input of the received sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and outputting [[a]] the pseudo-random number sequence of length N.

11. (Currently Amended) A communication system, comprising:

(1) a transmitter including

an input a signal acceptance section that accepts a signal for transmission;

the output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

a spreading section that uses the output pseudo-random number sequence of length N as a spreading code to spectrum-spread the signal for transmission whose input was accepted;

a signal transmitting section that transmits the spectrum-spread signal;

a selecting section that selects the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s; and

a parameter transmitting section that transmits the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s;

the output unit accepting input of the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and outputting ~~a~~ the pseudo-random number sequence of length N; and

(2) a receiver including

a signal receiving section that receives a signal;

[[an]] the output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

~~an inverse spreading~~ a despreading section that uses the output pseudo-random number sequence of length N as a spreading code to despread the received signal;

an output section that outputs the ~~inversely spectrum-spread~~ despread signal as [[a]] the signal for transmission; and

a parameter receiving section that receives the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s,

the output unit accepting input of the received sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and outputting [[a]] the pseudo-random number sequence of length N;

the receiver receiving the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s transmitted by the transmitter; and

the receiver also receiving a signal transmitted by the transmitter.

12. (Currently Amended) A communication system, comprising:

(1) a transmitter including

~~an input~~ a signal acceptance section that accepts a signal for transmission;

the output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

a spreading section that uses the output pseudo-random number sequence of length N as a spreading code to spectrum-spread the signal for transmission whose input was accepted;

a signal transmitting section that transmits the spectrum-spread signal; and

a parameter receiving section that receives the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s,

the output unit accepting input of the received sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and outputting [[a]] the pseudo-random number sequence of length N; and

(2) a receiver including

a signal receiving section that receives a signal;

the output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

~~an inverse~~ a despreading section that uses the output pseudo-random number sequence of length N as a spreading code to despread the received signal;

an output section that outputs the ~~inversely spectrum spread~~ despread signal as [[a]] the signal for transmission;

a selecting section that selects the sequence initial values $Y_1, Y_2, ..., Y_s$ and the integer parameters $p_1, p_2, ..., p_s$; and

a parameter transmitting section that transmits the selected sequence initial values $Y_1, Y_2, ..., Y_s$ and integer parameters $p_1, p_2, ..., p_s$,

the output unit accepting input of the selected sequence initial values $Y_1, Y_2, ..., Y_s$ and integer parameters $p_1, p_2, ..., p_s$ and outputting ~~a~~ the pseudo-random number sequence of length N;

the transmitter receiving the sequence initial values $Y_1, Y_2, ..., Y_s$ and the integer parameters $p_1, p_2, ..., p_s$ transmitted by the receiver; and

the receiver also receiving a signal transmitted by the transmitter.

13-25. (Canceled)

26. (Currently Amended) A computer-readable data recording medium recorded with a program that enables a computer to function as an output unit responsive to s ($1 \leq s$) number of prescribed positive integers $q_1, q_2, ..., q_s$, a prescribed real impulse constant r ($-1<r<1$), and a prescribed non-zero real constant C for outputting a pseudo-random number sequence of length N ($1 \leq N$), ~~which~~ the output unit ~~comprises~~ comprising:

an input acceptance section that accepts input of s ($1 \leq s$) number of real number sequence initial values $Y_1, Y_2, ..., Y_s$ ($-1< Y_1<1, -1< Y_2<1, ..., -1 \leq Y_s<1$), and s number of integer parameters $p_1, p_2, ..., p_s$ ($2< p_1, 2 \leq p_2, ..., 2 \leq p_s$) for which $q_1 \bmod p_1 \neq 0$, $q_2 \bmod p_2 \neq$

a selecting section that selects the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s; and

a parameter transmitting section that transmits the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s; and

operates the output unit to accept input of the selected sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and output [[a]] the pseudo-random number sequence of length N.

32. (Currently Amended) The data recording medium according to claim 30, whose program further operates the computer to function as:

a parameter receiving section that receives the sequence initial values Y_1, Y_2, ..., Y_s and the integer parameters p_1, p_2, ..., p_s; and

operates the output unit to accept input of the received sequence initial values Y_1, Y_2, ..., Y_s and integer parameters p_1, p_2, ..., p_s and output [[a]] the pseudo-random number sequence of length N.

33. (Currently Amended) A computer-readable data recording medium recorded with a program that enables a computer to function as a receiver comprising:

a signal receiving section that receives a signal;

~~an~~ output unit of claim 1 that outputs [[a]] the pseudo-random number sequence of length N;

~~an~~ ~~inverse~~ despreading section that uses the output pseudo-random number sequence of length N as a spreading code to despread the received signal; and

an output section that outputs the ~~inversely spectrum-spread~~ despread signal as [[a]] the signal for transmission.